IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
ROCK HILL DIVISION

Zekiya Knox, Plaintiff, v. The United States of America; Amisub of SC, Inc., d/b/a Piedmont Medical Center; South Carolina Emergency Physicians, LLC; Jeffrey Warden, MD; Brian Fleet, PA; Piedmont General Surgery Associates, LLC; Alex Espinal, MD; Bret Garretson, MD; and Digestive Disease Associates, Defendants.	C/A No. 0:17-cv-36-CMC **Opinion and Order on Motions by Amisub of SC, Inc. (d/b/a Piedmont Medical Center) to Exclude Expert Testimony and for Summary Judgment** **(ECF Nos. 124, 125)**

Through this action, Zekiya Knox ("Plaintiff") seeks recovery for alleged medical malpractice by a variety of medical providers involved in her care from September 2013 through May 2014.[1] Plaintiff alleges these providers failed to properly and timely diagnose and treat her underlying condition, Crohn's disease, and that this failure led to the development of sepsis. Plaintiff further alleges various Defendants failed to properly treat her sepsis and that the collective errors led to Plaintiff's loss of three limbs. Plaintiff asserts a single claim for medical negligence

[1] Plaintiff alleges errors by each of the following Defendants: (1) her primary care provider, North Central Family Medical Clinic ("NCFMC"), for which the United States of America is substituted as Defendant; (2) the hospital at which she received emergency and other treatment, Amisub of SC, Inc., d/b/a Piedmont Medical Center ("Piedmont"); (3) Piedmont emergency department medical providers Jeffrey Warden, MD ("Dr. Warden"), Brian Fleet, PA ("Fleet"), and their employer South Carolina Emergency Physicians, LLC ("SCEP"); (4) her surgeon, Alex Espinal, MD ("Dr. Espinal"), and his employer, Piedmont General Surgery Associates, LLC; and (5) her gastroenterologist, Bret Garretson, MD ("Dr. Garretson"), and his employer, Digestive Disease Associates. *See* ECF No. 88 (Second Amended Complaint).

against all Defendants, though the specifically alleged errors vary between Defendants. *See* ECF No. 88 (Second Amended Complaint).

The matter is before the court on motions of Defendant Piedmont for exclusion of expert testimony (ECF No. 124) and summary judgment (ECF No. 125). The first motion seeks to exclude a portion of the anticipated opinion testimony of Plaintiff's expert Paul Marik, MD ("Dr. Marik").[2] Specifically, Piedmont seeks to exclude Dr. Marik's opinion administration of a 75 mcg/min dose of the vasopressor Levophed caused Plaintiff's loss of three limbs. ECF No. 124.[3]

Piedmont's second motion seeks summary judgment based on: (1) the absence of causation evidence; (2) application of S.C. Code Ann. § 15-32-230, which establishes a gross negligence standard for recovery for certain emergent, in-hospital errors, and (3) arguments Piedmont is not liable for the actions of non-employee physicians. ECF No. 125. For reasons set forth below, the motion to exclude aspects of Dr. Marik's causation testimony is denied. The motion for summary judgment is granted to the extent Piedmont seeks a ruling S.C. Code Ann. § 15-32-230 applies to the anesthesiologist's actions during Plaintiff's May 5, 2014 surgery and Plaintiff has failed to proffer evidence to satisfy the gross negligence standard imposed by that statute. The motion is denied in all other respects.

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[2] Dr. Marik's report is dated October 3, 2017, and is filed as ECF No. 139-5 ("Marik Report"). His complete deposition, taken January 12, 2018, is filed as ECF No. 124-1 ("Marik dep.").

[3] Vasopressors (sometimes referred to as "pressors") increase blood pressure by decreasing blood vessel circumference and have the collateral effect of decreasing blood flow to limbs. Dr. Marik dep. at 33, 59. "Levophed" is a brand name for the vasopressor norephinephrine, which is also called ephinephrine and "nor-epi." *See, e.g.,* ECF No. 125-10 (package insert); Dr. Marik dep. at 13, 14, 16; ECF No. 124 at 3 (Piedmont memorandum). To avoid confusion, the court uses the brand name Levophed in all references to this drug.

ALLEGATIONS AGAINST PIEDMONT

Plaintiff's claim against Piedmont arises from her brief hospitalization there, which began on May 4, 2014, and ended with Plaintiff's transfer to Carolinas Medical Center ("CMC") on May 6, 2014. The Second Amended Complaint includes the following relevant allegations:

> 3. Defendant Amisub of SC, Inc. d/b/a Piedmont Medical Center ("Piedmont") is a South Carolina corporation with its principal place of business in York County, SC. Piedmont runs a hospital, and in connection with that, employs a number medical professionals, including nurses, technicians, and others. *Piedmont also enters into contracts with certain physicians for the exclusive provision of medical services in its hospital* such as ER physicians, radiologists, hospitalists, and others. *Each of the underlying medical professionals, be they doctors, nurses, or others were at all times relevant hereto acting within the course and scope of their actual or apparent agency or employment with Piedmont.*
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> 37. Instead [of receiving proper treatment for her Crohn's disease], Ms. Knox was left to continue to suffer from her condition, only to be returned to [Piedmont] on May 4, 2014. This time, she was ultimately worked up and got a CT. She had, and has had for months, untreated and, unknown to her, Crohn's disease. This condition was fully treatable if caught frankly anytime within a day or two of her presentation back to [Piedmont] on May 4. *The condition in her lower right abdominal cavity had caused significant damage to her intestines and caused a life threatening infection. This infection is called sepsis, a body wide inflammatory reaction to the raging infection.*
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> 38. Sepsis causes a number of life threatening problems within the human body and the condition is caused by infection. In the case of Ms. Knox, *the sepsis caused among other things a decrease in her blood pressure. This necessitated the use of pressors, powerful drugs that constrict the vessels,* in the hope to raise blood pressure to feed the brain and other vital organs. What is gained for the brain and other organs comes at the expense of the extremities. *The pressors tend to cut off flow to the extremities, thus starving them of vital oxygen and nutrition to survive.*
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> 38.1 *If used properly, pressors do not result in limb loss.* There is a critical balance between maintaining the blood pressure at adequate levels while not causing too much "squeeze" which can cause a damaging lack of blood flow. Here, *the nurse at the Piedmont ICU used the pressors in a grossly negligent and reckless manner. This was a substantial contributing cause of the limb loss.* Particularly, *the nurse on the night shift from May 5 to May 6 overdosed the pressors by giving 75 mics/min (in excess of the order and the hospital policy), improperly relied on a*

> *knowingly inaccurate arterial line, and failed to report the signs and symptoms of ischemia that arose during this time.*
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> 39. Ms. Knox suffered these consequences of the sepsis and mismanagement of the pressors—she has lost three limbs. She went from a college athletic scholarship recipient to a triple amputee-- Two above the knee amputations and a loss of her right arm below the elbow. She also lost the tips of her fingers on her remaining hand. All of this was avoidable.

ECF No. 88 ¶¶ 3, 38-39 (emphasis added); *see also id.* at 15, 16 (summarizing allegations of errors by "Nurses at Piedmont").

DISCUSSION

Piedmont's motions to exclude Dr. Marik's causation testimony and for summary judgment are addressed, in order, below.

I. Exclusion of Dr. Marik's Causation Testimony

A. Arguments of the Parties

Piedmont's Arguments. Piedmont seeks to exclude Dr. Marik's opinion testimony "that the vasopressor drug [Levophed] administered at a dosage of 75 micrograms per minute ["mcgs/min"] caused [Plaintiff] to suffer irreversible injuries to her limbs leading to amputations." ECF No. 124 at 1. Piedmont argues Dr. Marik's "method for assessing causation is scientifically unreliable" because he "does not rely on a single peer-reviewed study" and admits no scientific experiments have been done. *Id.* at 1, 2. In making this argument, Piedmont focuses on eight case studies, reports, and presentations on which Dr. Marik relied, in whole or in part, in forming his opinion. *Id.* at 8 (explaining the case reports "are papers reporting observations made in particular clinical cases," that "do not test his hypothesis[,]" "were not designed to test whether a particular dose of [Levophed] is associated with permanent tissue injury[,]" and all lacked "placebo control[s]"); *id.* at 9-14 (addressing each case study, report or presentation).

Plaintiff's Response. In response, Plaintiff argues her claim against Piedmont

> focus[es] on her providers' choice and management of vasopressors, a powerful group of blood pressure-boosting medications. [She] alleges [Piedmont] doctors misjudged her illness by attributing her low blood pressure to a blood vessel issue when the clinical evidence showed her real problem was inefficient heart function. . . . [Piedmont] medical providers compounded this error by the way they prescribed and managed the vasopressor [Levophed]. [Plaintiff] received [Levophed] doses far in excess of what her doctor ordered and far above [Piedmont's] standing order for the drug. . . . The highest [Levophed] doses Piedmont providers administered, up to 75 mcg/min, were not documented anywhere in [Plaintiff's] chart, a violation of both industry standard and South Carolina law. . . . [Plaintiff] also faults [Piedmont] for the way [Levophed] was adjusted from one dose to another. [Levophed] must be adjusted to attain and maintain a safe blood pressure, but [Plaintiff's] blood pressure readings were not properly documented during her May 4, 2014 [*sic*], surgery and her nurses failed to realize a blood pressure-measuring device was reporting misleading data.

ECF No. 140 at 1, 2. Plaintiff further asserts she began showing signs of ischemia after the Levophed dosage was increased, but her nurses failed to properly report and her physicians failed to properly address these signs. *Id.* at 3.

Plaintiff argues the "strong connection between high-dose [Levophed] and ischemia" is supported both by Dr. Marik's testimony and by two of Plaintiff's treating physicians at Piedmont. *Id.* at 3 (citing Dr. Start dep. at 76-77; Dr. Coplin dep. at 53).[4] She characterizes Dr. Marik's opinion that 75 mcg/min is an excessive dose of Levophed as based on maximums recognized by "the world's leading physicians in this specialty" and routine limits imposed by hospitals. *Id.* (citing Dr. Marik dep. at 15, 16, 97.

[4] Dr. Start is the anesthesiologist responsible for Plaintiff's care during her May 5, 2014 surgery. Dr. Start dep. at 7, 8. Dr. Coplin is an intensivist who treated Plaintiff during her stay in the intensive care unit ("ICU"). *See* ECF No. 139 at 12 (Plaintiff's memorandum).

In subsequent discussion, Plaintiff points to Dr. Marik's testimony medical providers at Piedmont made multiple errors in treating Plaintiff during her May 2014 hospitalization including: (1) incorrectly diagnosing "vasodilatory shock" rather than "cardiogenic shock," which led to the treatment with vasopressors (*id.* at 6 (citing Dr. Marik dep. at 17-18, 53))[5]; (2) using the "wrong blood pressure measurement" to adjust the Levophed (*id.* at 7 (citing Dr. Marik dep. at 51, 52, for proposition providers improperly relied on systolic blood pressure rather than mean arterial pressure ("MAP")); and (3) failure by nurses to identify problems with the electronic monitoring system leading to improper alteration of dose (*id.* at 7 (citing Dr. Marik dep. at 42-48, 53, 54)). Plaintiff argues these errors "contributed to the decision to administer dangerously high [Levophed] doses." *Id.* at 7. While acknowledging Levophed's manufacturer does not state a maximum dose, she cites Dr. Marik's testimony that there is a "'general consensus' among international leaders in critical care medicine" that doses should be limited to "20 mcg/min with 40-60 mcg/min doses . . . in extreme cases." *Id.* (citing Dr. Marik dep. at 14-16, 97 and referring to "research presented at a 2017 international medical conference").

Plaintiff argues Dr. Marik's causation opinion is properly based on the "whole clinical picture, the known pharmacology of [Levophed], a general consensus on its acceptable use, and the published cases of negative consequences from high doses. *Id.* at 8. She notes Dr. Marik relied on "differential diagnosis principles" in ruling out the alternative cause suggested by Piedmont's expert witness (disseminated intravascular coagulation ("DIC")). *Id.* at 9; *see also id.* at 17-20

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[5] Dr. Marik explains vasodilatory shock involves a problem with the blood vessels, while cardiogenic shock involves a problem with the heart, and prescribing high-dose vasopressors in the latter circumstance is "the worst thing to do." Dr. Marik dep. at 18, 53.

(addressing differential diagnosis analysis). Plaintiff also refers to multiple notations in medical records relating to her care at CMC, immediately after her stay at Piedmont, attributing her limb ischemia to the use of vasopressors.[6]

Piedmont's Reply. In reply, Piedmont notes Plaintiff's failure to cite any peer-reviewed study or to defend the adequacy of the case studies addressed in Piedmont's opening memorandum. ECF No. 154 at 2. Piedmont also argues Plaintiff is seeking to "change the argument" by devoting significant discussion to "unrelated questions such as whether vasopressors generally increase the risk of ischemia, or differential diagnosis, or issues with damping the blood pressure measurement system." *Id.* at 3. Piedmont notes its motion "deals with Dr. Marik's causation opinion . . . that the administered dose of 75 mcg/min caused the Plaintiff's limb ischemia and resulted in Plaintiff's amputations." *Id.* at 3.

B. Standard

As recently summarized in *Plaintiffs Appealing CMO 100 v. Pfizer, Inc.*, ___ F.3d __, No. 17-1140 (4th Cir. June 12, 2018):

> In assessing the admissibility of expert testimony, a district court assumes a "gatekeeping role" to ensure that the "testimony both rests on a reliable foundation and is relevant to the task at hand." [*Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993)]. The district court's inquiry is a "flexible one," whose focus "must be solely on principles and methodology, not on the conclusions that they generate." *Id*. at 594–95. *Daubert*'s design is to "make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999).

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[6] These contemporaneous notes do not suggest the use of vasopressors (which were administered both at Piedmont and CMC) was improper, only that vasopressor use was viewed as a cause of the limb injuries.

Slip. Op. at 10.

C. Discussion

Piedmont is correct in noting Plaintiff's response focuses on issues not raised in its motion for exclusion. That motion is limited to challenging the admissibility of Dr. Marik's causation testimony linking the 75 mcg/min dose of Levophed to Plaintiff's ultimate injuries. To the extent Plaintiff addresses other alleged errors, her arguments are not germane to the sole issue raised in Piedmont's motion for exclusion. Nonetheless, focusing on the sole issue raised, the court finds Piedmont's motion should be denied.

Piedmont's challenge focuses on the sufficiency of eight case reports, articles, and presentations to support Dr. Marik's causation opinion. The court agrees (and Plaintiff does not contest) these reports do not, alone, support Dr. Marik's causation opinion.[7] Dr. Marik's causation opinion does not, however, rest on so narrow a foundation. He, instead, relies first on what appears to be an undisputed premise that vasopressors in large doses *may* cause limb ischemia.[8] Dr. Marik then applies differential diagnosis techniques to rule out other causes, most critically the alternative cause Piedmont's expert, Dr. Hotchkiss, opined was the sole cause of Plaintiff's limb loss, disseminated intravascular coagulation or "DIC." *See Westberry v. Gislaved Gummi AB*, 178 F.3d

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[7] As Piedmont argues, the articles address various vasopressors and, at most, demonstrate a correlation between use of vasopressors and limb injury. Thus, they may support formation of a hypothesis, not a conclusion, that there may be a causative link.

[8] Both Dr. Start and Dr. Coplin agreed with this premise in their depositions. Dr. Start dep. at 76, 77 (identifying two risks of "too much vasopressor" including making it harder for the heart to pump out blood and "decreased perfusion to the periphery"); *id.* at 140 (agreeing high doses of Levophed pose a risk of ischemia (lack of blood flow) and this may cause limb loss); Dr. Coplin dep. at 53 (testifying "all pressors have side effects, . . . even at normal doses" and agreeing "one of the side effects . . . is ischemia, potentially limb ischemia").

257, 262-63 (4th Cir. 1999) (defining differential diagnosis as "a standard scientific technique of identifying the cause of a medical problem by eliminating the likely causes until the most probable one is isolated" and holding "a reliable differential diagnosis provides a valid foundation for an expert opinion").

Dr. Marik noted the absence of any statement in Plaintiff's chart that she had DIC. Dr. Marik dep. at 66 (also stating he was "not sure she met the full-blown criteria for DIC" and opining she, instead, had "coagulopathy of sepsis"). He explained that a DIC diagnosis requires coagulopathy as well as "bleeding at multiple sites," and Plaintiff's records support the conclusion she had coagulopathy but not bleeding. *Id.* at 68, 69.[9]

More critically, Dr. Marik explained, DIC does not cause large vessel obstruction or the condition that led to Plaintiff's loss of limbs. *Id.* at 66, 67 (explaining coagulopathy of sepsis may cause clots in the small vessels but not large vessels, whereas drugs such as Levophed cause constriction of the large vessels).[10] He further explained coagulopathy of sepsis "may cause

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[9] Drs. Start and Coplin each made statements in their depositions that *may* provide some support for Dr. Marik's conclusion DIC did not cause Plaintiff's limb ischemia. Dr. Start dep. at 140 (stating Plaintiff did not have DIC at the time of her surgery); Dr. Coplin dep. at 53 (stating he does not recall ever diagnosing Plaintiff with DIC).

[10] Apparently addressing a "paper by Dr. Hotchkiss on DIC and symmetrical peripheral gangrene[,]" Dr. Marik explained as follows:

> [W]hat you have is severe vasoconstriction, often with microcirculatory changes, which may be compatible with DIC. But the DIC per se is not going to cause the large vessel to clamp down and be obstructed.
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> And in every single one of these cases, the patients were on high-dose vassopressors. And they go into discussion about the DIC and the vasopressors and they seem to both play a role. But it seems that without the high doses of vasopressors, this peripheral gangrene doesn't happen because the

abnormal perfusion in the digits, the small peripheries. It's not going to cause major limb ischemia because it's the territory of a large blood vessel." *Id.* at 69.

Whether or not this is enough to persuade the jury, it is enough to satisfy the basic requirements for admission of expert testimony. The motion for exclusion is, therefore, denied.

II. Summary Judgment

Piedmont makes three arguments in support of summary judgment. First, Piedmont argues Plaintiff cannot meet her burden of establishing causation. Second, Piedmont argues S.C. Code Ann. § 15-32-230 requires application of a gross negligence standard to the the decision to increase the Levophed dose during surgery and Plaintiff cannot meet that standard. Third, Piedmont argues it cannot be held liable for the actions of the anesthesiologist, because he was an independent contractor rather than an employee of Piedmont. The specific arguments of the parties as to these issues are summarized in Subsections II.B. through II.D. below.

Before responding to Piedmont's specific arguments, Plaintiff lists multiple "instances of substandard treatment" she alleges occurred at Piedmont and support her claim against that entity including: (a) failing to transfer her to a major medical center (before her surgery); (b) failing to properly determine the root cause of her septic shock (cardiogenic rather than vasodilatory) leading physicians to "prescribe the wrong medication"; (c) failing to properly place the arterial line during surgery; (d) failing to identify problems with the arterial line after placement; (e) using the wrong standard for measuring blood pressure (systolic vs. MAP); (f) administering excessive doses of Levophed; (g) nurses' failure to follow physician's orders and Piedmont's standing orders

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> microthromboses affects the small vessels, the vasopressors cause clamping down of the large vessels.

Id. at 9, 66, 67.

regarding Levophed doses; and (h) nurses' failure to alert physicians to signs of ischemia. ECF NO. 139 at 3-6; *see also id.* at 6,7 (stating a dispute of fact remains whether Piedmont nurses or the anesthesiologist increased the Levophed dose to 75 mcg/min because Dr. Start does not independently recall increasing the dose to this level).

Piedmont's reply characterizes Plaintiff's list of alleged errors as "add[ing] previously unasserted claims." ECF No. 155 at 1. In addition, Piedmont asserts most of them fail, even if allowed, because they are dependent on a finding the 75 mcg/min dose of Levophed caused Plaintiff's injuries, the issue addressed in Piedmont's first argument in support of summary judgment. *Id.* at 3-8.

A. Standard

Summary judgment should be granted if "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). It is well established that summary judgment should be granted "only when it is clear that there is no dispute concerning either the facts of the controversy or the inferences to be drawn from those facts." *Pulliam Inv. Co. v. Cameo Properties*, 810 F.2d 1282, 1286 (4th Cir. 1987). The party moving for summary judgment has the burden of showing the absence of a genuine issue of material fact, and the court must view the evidence before it and the inferences to be drawn therefrom in the light most favorable to the nonmoving party. *United States v. Diebold, Inc.*, 369 U.S. 654, 655 (1962).

B. Adequacy of Causation Testimony

Piedmont argues it is entitled to summary judgment because there is no admissible evidence that the "dosage of 75 mcg/min of Levophed caused Ms. Knox's limb amputations" and "[s]cience does not recognize the theory or concept of a Levophed 'overdose.'" ECF No. 125-1

at 8. The court disagrees for reasons explained above in addressing Piedmont's motion to exclude Dr. Marik's causation testimony. The court, therefore, denies the motion for summary judgment to the extent it rests on this argument.

C. Application of S.C. Code Ann. § 15-32-230

1. Arguments of Parties

Piedmont's Arguments. Piedmont argues it is entitled to summary judgment for any claim arising from the anesthesiologist's decision to increase the dose of Levophed to 75 mcg/min because the decision was made during emergency surgery, requiring application of a gross negligence standard under S.C. Code Ann. § 15-32-230 ("Section 15-32-230") and there is no evidence of gross negligence.

Plaintiff's Response. Plaintiff argues there are genuine issues of material fact whether Plaintiff's surgery was a "genuine emergency," raising a jury issue as to one of the requirements for application of Section 15-32-230. ECF No. 139 at 14 (challenging Dr. Start's characterization of surgery as emergent). She also argues the statute does not apply because the hospital, rather than the physician, is named as Defendant and does not, in any event, apply to errors by nurses regardless of where they may have occurred. ECF No. 139 at 15. As applied to physician errors, Plaintiff argues the statute is unconstitutional (violative of the Equal Protection clauses of the United States and South Carolina constitutions) because the legislature lacked a rational basis for imposing a different standard based on the location within a medical facility where negligent acts occur. ECF No. 139 at 15, 16.

In the alternative, Plaintiff argues there are genuine issues of material fact whether "doctors were guilty of at least gross negligence during her surgery." ECF No. 139 at 17 (noting issue is "a mixed question of law and fact" generally left for resolution by a jury). Plaintiff notes various

potential factors that may be considered including whether there is a statutory or regulatory violation and whether Piedmont violated its own operational policies. *Id.* at 17, 18. Plaintiff then cites testimony arguably supporting the following premises: (1) a chart indicates nurses violated Piedmont's "High Alert Medication" policy; and (2) "a nurse violates [Piedmont's] policies and procedures each time he/she adjusts medication to a dose that exceeds a doctor's order." She also argues Dr. Marik's expert report supports a finding of gross negligence because he opined the combination of errors addressed in that report, Levophed "mismanagement, a persistently inaccurate arterial line, and nurse silence despite observable signs of ischemia amounted to reckless misconduct." *Id.* at 18, 19.

Piedmont's Reply. In reply, Piedmont characterizes Plaintiff's response as conceding Section 15-32-230 covers her "emergency operation" because she does not argue she was medically stable or not in immediate threat of death. ECF No. 155 at 5. Piedmont points to medical records indicating the surgery was emergent and an absence of contrary evidence. *Id.* at 6 (citing prior memorandum's discussion of records including the surgeon's description of the surgery as an "emergent exploratory laparoscopic" procedure and Dr. Start's pre-surgical notation the outlook was "very grim").

Piedmont argues Plaintiff has failed to demonstrate "Dr. Start failed to exercise 'slight care' in increasing her [Levophed] dose." *Id.* It notes Plaintiff relies on allegations Dr. Start failed to properly chart his dose changes and argues this alleged error cannot support a finding of gross negligence because it did not cause of any injury. *Id.* n. 4. Piedmont also notes Plaintiff has identified no policy precluding a physician from increasing the dose. *Id.* at 7.

Responding to Plaintiff's argument the statute is inapplicable because Piedmont is an entity rather than a physician, Piedmont notes Plaintiff is seeking to hold it responsible for the actions of

an independent-contractor physician. *Id.* at 6, 7. It argues if liability may flow to Piedmont, so too would statutory protections given the derivative nature of the liability. *Id.* Piedmont does not address Plaintiff's constitutional challenge.

2. Section 15-32-230

Section 15-32-230 provides, in relevant part, as follows:

> (A) In an action involving a medical malpractice claim arising out of care rendered in a genuine emergency situation involving immediate threat of death or serious bodily injury to a patient receiving care in . . . [a] surgical suite, no physician may be held liable unless it is proven that the physician was grossly negligent.
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> (C) The limitation on physician liability established by subsection[] (A) . . . shall only apply if the patient is not medically stable and:
>
> (1) in immediate threat of death; or
> (2) in immediate threat of serious bodily injury.
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> Further the limitation on physician liability established by subsection[] (A) . . . shall only apply to care rendered prior to the patient's discharge from the . . . surgical suite.

S.C. Code Ann. § 15-32-230.

3. Discussion.

Application to Medical Facility. The court first considers Plaintiff's argument the statute is inapplicable because the named Defendant is a medical facility rather than a physician. This argument is not persuasive as Plaintiff's claim against Piedmont depends on a finding Piedmont is liable for the physician's alleged violation of the applicable standard of care. *See infra* Discussion § II.D. (addressing Piedmont's potential liability for independent-contractor physicians). Thus, to the extent Plaintiff's claim arises from the anesthesiologist's decision to increase the dose of Levophed, it is a claim based on the anesthesiologist's alleged negligence during surgery for which Plaintiff seeks to hold Piedmont liable under a respondeat superior theory of liability. It follows

that the statute applies to the derivative claim against Piedmont to the same extent it would apply if the physician was the named Defendant.

Constitutionality. Plaintiff's argument the statute is unconstitutional as violative of equal protection fares no better. To succeed on this argument Plaintiff must show that the statute, specifically the decision to apply its protections only to actions occurring in specified locations in hospitals (within emergency departments, obstetrical suites, and surgical suites), lacks any rational basis. As Plaintiff explains, the factors considered are (1) whether the law treats similarly situated persons differently, (2) whether there is a rational basis for any disparate treatment, and (3) whether any disparate treatment bears a rational relationship to a legitimate governmental purpose. ECF No. 139 at 16 (citing, *e.g.*, *Allegheny Pittsburgh Coal Co. v. Cnty. Comm'n of Webster Cnty., W. Va.*, 488 U.S. 336, 343 (1989).

It is questionable whether the first factor is even implicated, given the challenged distinction is not between different groups of "similarly situated persons" but between locations in the hospital where the statute comes into play. Even if the distinction can fairly be characterized as distinguishing between similarly situated persons, Plaintiff points to nothing that would demonstrate the absence of a rational basis for the distinction. A legislature might, for example, provide greater protection to physicians in the listed locations (emergency rooms, obstetrical suites, and surgical suites) because these are locations where emergent situations most often occur, to encourage physicians to practice in these areas, or any number of other reasons. *See generally Gliemmo v. Cousineau,* 694 S.E.2d 75 (Ga. 2010) (rejecting equal protection and other constitutional challenges to statute that required proof of gross negligence by clear and convincing evidence to recover for claims "arising out of the provision of emergency medical care in a hospital

emergency department or obstetrical unit or in a surgical suite immediately following the evaluation or treatment . . . in a hospital emergency department").[11]

Statutory Requirements Satisfied. Section 15-32-230 is implicated to the extent any alleged negligent act was (1) taken by a physician, (2) during emergency surgery, and (3) occurred within the surgical suite. Plaintiff offers no evidence or argument Dr. Start's actions (including any decision he made to increase the dose of Levophed to 75 mcg/min during surgery) fail to meet the first or third requirement. She instead, challenges whether such actions occurred during "a genuine emergency situation involving immediate threat of death or serious bodily injury." S.C. Code Ann. 15-32-230(A).

Substantial evidence supports the premise the surgery itself was emergent, involving an immediate threat of death, and Plaintiff's plummeting blood pressure during surgery presented an additional emergent situation and further threat of death.[12] Plaintiff points to no evidence the

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[11] The Georgia Supreme Court found a legitimate purpose in the legislature's goal of "[p]romoting affordable liability insurance . . . and thereby promoting the availability of quality health care services[.]" *Gliemmo*, 694 S.E.2d at 79. The court explained "it is entirely logical to assume that emergency medical care provided in hospital emergency rooms is different from medical care provided in other settings, and that establishing a standard of care and burden of proof that reduces the potential liability of the providers of such care will help achieve those legitimate legislative purposes." *Id.*

[12] Dr. Start testified the surgery itself was emergent and he increased the Levophed dose to address a life threatening drop in blood pressure. *See* Dr. Start dep. at 9 (characterizing surgery as an "emergency case"); *id.* at 91, 92 (stating that while dose might not be reflected on the chart, it was reported to the nurse when Plaintiff left surgery and was "flashing on the pump"); *id.* at 96 (testifying Plaintiff's "profound hypotension," noted by her surgeon, indicates a life-threatening condition); *id.* at 105, 106 (explaining he did not make notations of the increases in Levophed doses, ultimately reaching to 75 mcg/min, because "we were very busy trying to get the blood pressure and maintaining this patient alive" and explaining he knows what doses were given from the "Alaris Pump record"); *id.* at 131 (stating he recalls Plaintiff's "blood pressure was very, very low," he "couldn't detect much blood flow," and remembers "quite clearly that things were not

surgery either was not emergent or Dr. Start's decision to increase the dose of Levophed occurred when Plaintiff was no longer "in immediate threat of death" or "serious bodily injury." S. C. Code Ann. § 15-32-230(C). She, instead, relies on Dr. Start's inability to specifically recall details regarding when he increased the dose and in what amount.

Under these circumstances, the court finds all requirements for application of Section 15-32-230 are satisfied as a matter of law. The gross negligence standard, therefore, applies to Plaintiff's claim against Piedmont to the extent the alleged negligent act was committed by a physician and occurred in surgery.

Gross Negligence. The final question is whether Plaintiff has proffered evidence from which a jury could find Dr. Start's actions in surgery amount to gross negligence. *See Etheredge v. Richland Sch. Dist. One*, 534 S.E.2d 275, 277 (S.C. 2000) (whether there was gross negligence "is a mixed question of law and fact" generally left to the jury). For reasons explained below, the court finds Plaintiff has failed to proffer evidence sufficient to present this issue to the jury.

As noted above, in opposing Piedmont's motion, Plaintiff points to two potential grounds for finding gross negligence: (1) violation of a statute or regulation; and (2) violation of an internal policy or procedure. Plaintiff cites no statute or regulation arguably violated by Dr. Start's increase of the Levophed dose during surgery. While she does refer to two internal policies or procedures, both relate to standards imposed on and alleged violations by nurses. *See* ECF No. 139 at 18 (citing evidence supporting premises "nurses violated the high alert medication policy by administering Levophed in excess of 30 [mcg/min]" and nurses may have violated Piedmont's

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going well"); *id.* at 132 (stating he does not recall the specific blood pressure, but does recall it was a significant problem, and does not specifically recall increasing the Levophed).

policies and procedures by exceeding the dose ordered by one of Plaintiff's physicians). Plaintiff points to no policy or procedure allegedly applicable to or violated by Dr. Start's allegedly negligent actions, most critically his decision to increase the dose of Levophed to 75 mcg/min during surgery.[13] Thus, Plaintiff has not proffered evidence of gross negligence based on violation of a statute, regulation, policy or procedure.

Plaintiff also relies on Dr. Marik's expert report for the proposition he opined "the combination of [Levophed] mismanagement, a persistently inaccurate arterial line, and nurses' silence despite observable signs of ischemia *amounted to reckless misconduct*." ECF No. 139 at 19 (emphasis added). This argument is misplaced because Dr. Marik's report does not address actions taken *in surgery* or *by a physician*. His report, instead, addresses alleged errors by nurses, who he believed (at the time of his report) had increased the Levophed dose without a physician's authorization. ECF No. 139-5 (addressing various alleged errors by one or more nurses and concluding the "nurse was reckless"). Plaintiff points to no other basis for finding Dr. Start's actions during surgery were grossly negligent.

Conclusion. For the reasons set forth above, the court finds as a matter of law (1) Section 15-32-230 requires application of a gross negligence standard to Dr. Start's actions during the course of Plaintiff's surgery, and (2) Plaintiff has failed to proffer evidence sufficient to satisfy the

[13] Near the conclusion of questioning by Piedmont's counsel, Dr. Marik confirmed he had only two criticisms of the anesthesiologist: (1) increasing the Levophed dose to 75 mcg/min; and (2) failing to ensure "the A-line that he put in was functional." Dr. Marik dep. at 110. Plaintiff does not address the arterial line in arguing Dr. Start's actions were grossly negligent. Neither has the court found any testimony in Dr. Marik's deposition that would support that premise.

gross negligence standard as to Dr. Start's in-surgery actions. This ruling has no application to any alleged error by nurses or by any medical provider occurring outside the surgical suite.[14]

D. Piedmont's Liability for Actions of Anesthesiologist and other Physicians[15]

1. Arguments of Parties

Piedmont's Arguments. Piedmont asserts Plaintiff "did not plead, and cannot cite evidence to prove, an agency relationship existed between her anesthesiologist and Piedmont" sufficient to hold Piedmont responsible for the anesthesiologist's actions. ECF No. 125-1 at 14 (also asserting Plaintiff cannot establish reliance on any representation by Piedmont). As to the first point, Piedmont argues Plaintiff has not satisfied the pleading standards of Rule 8 of the Federal Rules of Civil Procedure because she "merely states Piedmont's responsibility under apparent agency in a conclusory fashion." *Id.* at 15. As to the second point, Piedmont argues Plaintiff cannot establish apparent agency because she cannot show that she "changed her position to her detriment in reliance on alleged representations [by Piedmont] regarding" the anesthesiologist. *Id.* at 15, 16 (noting the emergency medical service, rather than Plaintiff, made

[14] While Plaintiff does not concede the point, the court is aware of no evidence a nurse or other non-physician, acting without a physician's orders, increased the dose of Levophed beyond that authorized by Piedmont's standing orders or procedures. Most critically, it appears the only evidence as to when and by whom the dose was increased to 75 mcg/min is that it occurred in surgery by Dr. Start or at his direction. Thus, the ruling here would appear to eliminate any issue relating to the propriety of the increase in dose to this level.

[15] In light of the ruling above as to Dr. Start's actions in surgery and the apparent absence of any allegations of a negligent act by him outside of surgery, this issue appears to be moot as to Dr. Start. The court, nonetheless, addresses the argument as it may be relevant to any allegations involving actions of other independent-contractor physicians.

the decision to take her to Piedmont and she "has no recollection" of the doctors who cared for her there).

Plaintiff's Response. In response, Plaintiff relies on *Simmons v. Tuomey Reg'l Med. Ctr.*, 533 S.E.2d 312 (S.C. 2000), which addresses agency issues in the hospital setting. ECF No. 139 at 19. Plaintiff argues *Simmons* supports holding Piedmont responsible for the actions of independent contractor physicians who work there, most critically her anesthesiologist, because she had no reason to know they were not Piedmont employees. *Id.* She notes Piedmont was solely responsible for the selection of the anesthesiologist through its contract with Anesthesiology Associates of Rock Hill, the exclusive provider of anesthesiology services at Piedmont.

Piedmont's Reply. In reply, Piedmont acknowledges the South Carolina Supreme Court recognized "ostensible agency (a/k/a nondelegable duty) as a mechanism for holding a principal liable for an independent contractor's actions" in *Simmons*. It, nonetheless, argues Plaintiff cannot rely on this theory because she "opted to pursue recovery under an apparent agency theory." ECF No. 155 at 7. Piedmont further asserts the "Second Amended Complaint does not provide adequate factual allegations to survive summary judgment." *Id.*; *see also id.* at 8 (relying on cases applying Fed. R. Civ. P. 8's pleading standards).

2. Discussion

The court rejects Piedmont's pleading argument. In the critical paragraph of her Second Amended Complaint, Plaintiff alleged Piedmont "enters into contracts with certain physicians for the exclusive provision of medical services in the hospital" and that such physicians "at all times relevant hereto act[ed] within the course and scope of their actual or apparent agency or employment with Piedmont." ECF No. 88 ¶ 3. These allegations gave Piedmont fair notice

Plaintiff intended to hold Piedmont liable for the actions of contract physicians. The court finds no basis to limit Plaintiff strictly to a traditional agency theory based on the allegations.

As Piedmont concedes, *Simmons* holds a hospital may be held liable for an independent contractor physician's actions based on what is sometimes called an "ostensible agency" theory. To hold the hospital liable:

> the plaintiff must show that (1) the hospital held itself out to the public by offering to provide services; (2) the plaintiff looked to the hospital, rather than the individual physician, for care; and (3) a person in similar circumstances reasonably would have believed the physician who treated him or her was a hospital employee. When the plaintiff does so, the hospital will be held vicariously liable for any negligent or wrongful acts committed by the treating physician. The hospital may attempt to avoid liability for the physician's acts by demonstrating the plaintiff failed to prove these factors.

Id. at 322 (also noting "[n]umerous courts have relied on section 429 in decisions allowing a plaintiff to attempt to hold a hospital vicariously liable for a purportedly independent physician's negligent acts").[16]

Piedmont does not argue and the record does not foreclose the possibility Plaintiff will be able to establish each of these elements. Piedmont's motion for summary judgment is, therefore, denied to the extent it rests on an argument Plaintiff cannot establish Piedmont is liable for the actions of its contract physicians.

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[16] In *Simmons*, the court addressed whether hospitals could be held liable for the actions of independent contractor physicians who provided emergency room services. The court addressed distinctions between the traditional apparent agency theory, which requires proof of reliance, and an alternative nondelegable duty theory. *Simmons*, 533 S.E.2d at 320. Resting "primarily [on] public policy reasons[,]" the court "impose[d] a nondelegable duty on hospitals" with respect to such services. *Id.* at 321. It, nonetheless, declined "to impose an *absolute* nondelegable duty" in these circumstances. *Id.* at 322 (relying on Restatement (Second) of Torts: Employers of Contractors § 429 (1965) and noting section was "sometimes described as 'ostensible agency'").

CONCLUSION

For the reasons set forth above, the motion to exclude Dr. Marik's causation testimony is denied. The motion for summary judgment is granted to the extent it seeks a ruling S.C. Code Ann. § 15-32-230 requires Plaintiff to establish gross negligence in order to recover for a physician's errors during her emergent surgery and she has not met that standard as to her allegations regarding Dr. Start's actions. The motion for summary judgment is otherwise denied.

IT IS SO ORDERED.

s/ Cameron McGowan Currie
CAMERON MCGOWAN CURRIE
Senior United States District Judge

Columbia, South Carolina
July 3, 2018